

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application

Listing of Claims:

1. (Currently amended) A negative electrode material for lithium secondary batteries, the negative electrode material being capable of storing and emitting lithium ions, comprising:

a basic material particle including one of a phase A having silicon as a main component, and a mixed phase of a phase B including an intermetallic compound of a transition metal element and silicon and the phase A, the phase A and the mixed phase being microcrystalline or amorphous,

a carbon material adhered to a part of a surface of the basic material particle, and

a film having a silicon oxide, the film being formed on a surface portion of the basic material particle, the surface portion being other than a surface portion to which the carbon material is adhered,

wherein, the film is formed in an atmosphere including an inert gas, and

the atmosphere is free of nitrogen.

2. (Original) The negative electrode material for lithium secondary batteries according to claim 1:

wherein the carbon material is graphite capable of storing and emitting lithium ions.

3. (Original) The negative electrode material for lithium secondary batteries according to claim 1:

wherein the carbon material is fibrous.

4. (Original) The negative electrode material for lithium secondary batteries according to claim 1:

wherein the amount of the film is at least 0.1 wt% and at most 1.0 wt% per silicon element in terms of oxygen amount.

5. (Previously presented) The negative electrode material for lithium secondary batteries according to claim 1:

wherein an adhesion amount of the carbon material is at least 1.9 wt% and at most 18 wt%.

6. (Currently amended) A negative electrode for lithium secondary batteries comprising a negative electrode material, the negative electrode material including:

a basic material particle including one of a phase A having silicon as a main component, and a mixed phase of a phase B including an intermetallic compound of a transition metal element and silicon and the phase A, the phase A and the mixed phase being microcrystalline or amorphous,

a carbon material adhered to a part of a surface of the basic material particle, and

a film having a silicon oxide, the film being formed on a surface portion of the basic material particle, the surface portion being other than a surface portion to which the carbon material is adhered

wherein, the film is formed in an atmosphere including an inert gas, and
the atmosphere is free of nitrogen.

7. (Original) A lithium secondary battery comprising:

the negative electrode of claim 6,

a positive electrode capable of storing and emitting lithium ions, and

an electrolyte interposed between the negative electrode and the positive electrode.

8. (Withdrawn-Currently amended) A manufacturing method of a negative electrode material for lithium secondary batteries, the negative electrode material being capable of storing and emitting lithium ions, comprising steps of:

A) forming a basic material particle including one of a phase A having silicon as a main component, and a mixed phase of a phase B including an intermetallic compound of a transition metal element and silicon and the phase A, the phase A and the mixed phase being microcrystalline or amorphous,

B) adhering a carbon material to at least a part of a surface of the basic material particle, and

C) covering a surface portion of the basic material particle by a film having a silicon oxide, the surface portion being other than a surface portion to which the carbon material is adhered,

wherein, the film is formed in an atmosphere including an inert gas, and
the atmosphere is free of nitrogen.

9. (Withdrawn) The manufacturing method of the negative electrode material for lithium secondary batteries according to claim 8:

wherein the step A is performed using a vibration mill machine.

10. (Withdrawn) The manufacturing method of the negative electrode material for lithium secondary batteries according to claim 8:

wherein the step A and the step B are continuously performed using a vibration mill machine.

11. (Previously presented) The negative electrode material for lithium secondary batteries according to claim 1, wherein the inert gas is argon.

12. (Cancelled).